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ABSTRACT

The paper describes a demonstrative project designed to help 52 mentally retarded or otherwise developmentally disabled adults obtain and maintain competitive employment. The trainees were first evaluated in a situational assessment covering seven areas: (1) attendance and stamina, (2) independence, (3) productivity, (4) learning style, (5) work habits, (6) social skills and communication, and (7) personal management. They then received intensive pre-employment training for 4 weeks. Volunteer work experience came next for two to four months of individualized instruction at community non-profit organizations. Then trainees were placed in competitive positions, receiving on-site training from job coaches. Upon completion of on-site training, trainees entered a supported employment phase for one year. Program evaluation data suggested that the program was a success. Twenty-eight Ss successfully completed on-site training, and employers' ratings were generally fairly high. Employment success factors were identified within the areas of training approach and methodology, program management, and trainee characteristics. (CL)

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COMMUNITY BASED COMPETITIVE EMPLOYMENT PREPARATION OF DEVELOPMENTALLY DISABLED PERSONS: FACTORS CONTRIBUTING TO SUCCESS

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INTRODUCTION

The movement to integrate disabled persons into the mainstream of societal participation has increased dramatically in recent years (Novak & Heal, 1980). The major philosophical impetus of community-based training and integration is embodied in the principle of normalization, stressing the delivery of service and resultant client participation in environs that are as culturally normal as possible (Wolfensberger, 1972). Interpretation of this principle includes the need to refocus, structure, and expand programs for disabled persons to encompass preparatory skills and behaviors necessary for participation within societal roles of value available to most residents of a community (Rusch & Schutz, 1981). Accompanying a decade of legislation and litigation mandating the rights of over 36 million disabled individuals to receive (re)habilitative and special education services, is the recognition and affirmation that productive work is a desirable, primary habilitation goal (Bellamy, Horner, & Inman, 1979; Olskansky, 1972). The federal mandates (The Education for All Handicapped Children Act: P.L. 94-142; The Rehabilitation Act of 1973: P.L. 93-112; Vocational Education Act Amendments: P.L. 94-482) reflect a major change in the nation's social and economic awareness. Unlike the legal provision for educational services, a transitional continuum of post secondary (re)habilitation services, reflective of the principles of normalization, remains in a more undeveloped state with services provided through a number of agencies and within the context of several conflicting delivery modes.

The service delivery vehicle traditionally structured to address the occupational/life space preparation needs of persons with disabilities has been the sheltered workshop. Over the years specific programs and clientele within workshops have changed, but the conceptual model as a dominant service delivery vehicle has prevailed within the self-contained/sheltered context. There has been no shortage of criticism concerning sheltered workshop practices, management, and overall programmatic relevancy as a service delivery model for persons with disabilities (Pomerantz & Marholin, 1977; Greenleigh Associates, 1975). Beyond the basic management difficulties of balancing production and (re)habilitation outcomes,

sheltered workshops appear to be facing an "identity crisis" concerning the determination of what services should or can effectively be provided for which clientele. National reports (Appleby, 1978; U. S. Department of Labor, 1979) have suggested that sheltered workshops have not demonstrated effectiveness in transitioning trainees from sheltered programs to competitive employment roles or in providing any significant remunerative work within workshop facilities. The U. S. Department of Labor (1979) report indicated that the average overall placement rate for sheltered workshops is 12% per year, and only 34% of the workshops reporting have a full-time placement specialist. This situation suggests that the use of sheltered programming structures with disabled persons has often not reflected the principles of normalization, the opportunity for growth and participation with social roles of value, or transitional movement toward independent and productive skills and behaviors. These problems of stagnation within the continuum of (re)habilitation services, coupled with the growing awareness that disabled persons should have an equal opportunity to lead dignified and normal lives make it necessary to encourage an exploration of alternative service delivery models.

COMMUNITY BASED COMPETITIVE EMPLOYMENT TRAINING FOCUS

A recent trend in the vocational (re)habilitation literature is the investigation and demonstration of procedures to prepare disabled persons for nonsheltered, competitive employment. Similar to reviews of sheltered program descriptions, these investigations apply learning and behavior principles to the acquisition and performance training of specific vocational tasks (Schutz and Rusch, 1982). Investigation of competitive employment training programs differ from sheltered program reviews in that they (a) reflect a more comprehensive view of individual trainee functioning in relation to work setting demands (Rusch & Shutz, 1981), (b) attempt to incorporate maintenance and generalization outcomes within training procedures (Schutz, Jostes, Rusch, & Lamson, 1980), (c) deemphasize the isolated demonstration of productive capabilities of disabled individuals and place more of an emphasis upon the totality of skills required for survival in the competitive labor market (Rusch & Schutz,

1979), (d) designate the content/process validity of training program variables to be within the specific work role settings found within the trainees' community of residence (Stodden, 1980; Schutz & Rusch, 1982), and (3) are concerned that training efforts contain mechanisms to efficiently transition trainees toward increasingly normalized, less restrictive functioning environments consisting of actual community and work role attributes (Brown, Pumpian, Baumgart, Vandeventer, Ford, Hisbet, Schroeder, Gruenewald, 1981). Studies reporting competitive employment skills training are still relatively new, yet indications are that disabled persons are capable of learning the necessary skills and assuming productive valued roles within society's work force.

Over the past few years a number of competitive employment training and placement model conceptualizations have been put forth (Rusch & Schutz, 1979; Wehman & Hill, 1980; Mithaug, Hagmeier, & Haring, 1977; Stodden, 1980). Currently, several of these models have been applied and expanded into demonstration programs with an attempt to evaluate the effectiveness of sequenced activities, outcomes and impacts. The focus of the current discussion is to describe a successful demonstration effort to train, place, and maintain persons with mental retardation and other developmental disabilities within competitive employment positions. Variables are analyzed in the areas of training methodology, program management, and trainee characteristics as they contribute to successful work adjustment.

PROJECT DESCRIPTION

This demonstration project was conceived to assist adults with mental retardation and other developmental disabilities to obtain and maintain employment in the competitive work force. Previous efforts of the service delivery system to provide employment services to this population had been characterized by difficulties in four areas: (1) service carrying capacity; (2) the lack of ideological commitment to competitive employment for developmentally disabled persons; (3) service methodology; and (4) follow-along support once employment had been secured (cf. Levitan and Taggart, 1977; Wood, 1980). The project under discussion

took these factors into account when recruiting staff, formulating the organizational structure, and selecting training methodology.

Trainees Served. Over 22 months, the project served 52 trainees with developmental disabilities, aged 18-60. When considered by primary disabling condition, 40 (76.9%) had mental retardation, 8 (15.4%) had learning disability, and 4 (7.7%) had cerebral palsy or chronic emotional disability. Forty-one (78.8%) had more than one disabling condition, 15 of whom had diagnosed psychiatric involvement.

Individuals were referred to the project from other training programs or from the State Division of Vocational Rehabilitation. They were referred as high risk cases, either because of the severity of their disability or because of repeated unsuccessful employment experiences. Twenty-two (42.3%) of the participants served had previous experience in the competitive work world, while 13 (25%) had only prevocational training or special education. The remaining 17 (32.7%) had volunteer or sheltered work experience.

PROGRAM SEQUENCE

The foundation for training methodology was experiential learning and individualized instruction as trainees passed through several steps on their way to independent employment. The steps were as follows:

Assessment. All applicants were provided a comprehensive assessment and evaluation, involving clinical and situational assessment procedures. Of greatest value in identifying an applicant's work potential was the situational assessment which involved observing the applicant in a variety of work roles at a local sheltered work setting. While it may be argued that sheltered work conditions are not as rigorous as competitive work standards, they provided an excellent opportunity for assessment, since work stations and work-related variables could be easily adjusted to m-et the applicant's needs. During the situational assessment the applicant was observed on variables in seven areas: (1) Attendance and Stamina; (2) Independence; (3) Productivity; (4) Learning Style; (5) Work Habits; (6) Social Skills and Communication; and (7) Personal Management.

In addition to these assessments, the project developed and used two questionnaires as part of the intake interview. The first, which was administered to the applicant, was used to ascertain the person's desire to work, and sense of work responsibility. This interview enabled the intake counselor to distinguish between those applicants who viewed the training program primarily as a place to occupy one's time, from those who viewed it as a stepping stone to employment and greater independence. The second questionnaire was administered to the applicant's home support system, whether they were family members or agency home managers. This questionnaire was developed in response to the literature over the past thirty-eight years which has consistently reported the influence of family and home support as a significant variable in employment success (e.g., O'Brien, 1952; Bodham, 1955; Kolstoe, 1961; Edgerton, 1967). The home support questionnaire was used to investigate the family's attitude toward the capabilities of the disabled person and employment, and the family's willingness to provide emotional and technical support to the trainee pursuing employment goals.

None of the assessment tools described was used as a predictive measure of employment success. Rather the assessment information was examined for the descriptive information it yielded regarding the functioning level, and training/support needs of the applicant.

Pre-Employment Training. Upon acceptance into the project, trainees met daily for four weeks in small classes (maximum of six) for intensive Pre-Employment Training (PET). PET was important as a time for building rapport between the trainees and project staff, and for instructors to develop individualized training programs for each trainee. During this time, PET provided work adjustment training in attendance, punctuality, following directions, cooperativeness, perseverence, and communication. The objectives of PET were accomplished through a number of training strategies, including individual and group problem-solving exercises, role-play situations with video recorded feedback, peer tutoring, and practical experiences which were conducted in retail, government, and other community locations.

Work Experience. Following Pre-Employment Training, trainees participated in volunteer work experience in community locations for two to four months. Work experience afforded the opportunity for trainees

to develop good work habits, social interaction and problem-solving skills, self-confidence and job skills in community environments, which were supportive of their employment goals. Trainees gained experience in such varied areas as cashier, stable hand, custodian, nursery worker, recreation aide, grocery produce worker, and file clerk.

As in Pre-Employment Trainings, the training methodology stressed individualized instruction. Project staff, serving as Job Coaches, provided on-site counseling and instruction to trainees at their work experience stations. Working in partnership with work place supervisors, the Job Coaches implemented training plans for reaching skill and behavioral objectives. Evaluations of trainees' progress were conducted as cooperative efforts of the coach and supervisor.

The use of non-profit organizations yielded several advantages for training. First, as volunteer agencies, they were able to offer trainees work training without coming into conflict with Department of Labor regulations (see 1985 MARF VOC/DEV 2(1):2). Second, since non-profit organizations relied heavily on volunteer assistance, the work offered was meaningful and genuinely needed for the organization's operation. This aspect of fulfilling real needs provided an important incentive for the trainees to develop conscientious work habits, and it contributed to their growing sense of self-esteem. Third, since non-profit organizations were human service-oriented, they provided a supportive yet normalized learning environment for trainees to overcome social barriers to employment success. The final advantage of non-profit organizations was the opportunity they afforded trainees to become functionally integrated with the non-handicapped world. As consumers in the service delivery system, disabled persons have had a long (and often forced) history of dependence on others. Through volunteer work experience, these individuals were taught to see their potential and responsibility to be meaningful contributors to the community. In summary, work experience proved to be a mutually beneficial relationship for the developmentally disabled trainees and the non-profit organizations.

On-Site Training in Competitive Employment. After work experience, trainees were placed in competitive positions in which they received entry level wages from the employer and on-site training by Job Coaches. In cooperation with employers, coaches implemented training plans which

were designed to bring trainees to full competitive standards within 90 days. On-site training not only addressed production speed and quality, but also work habits and interpersonal skills. The coaches' goal was to assist the trainee to become an integrated and fully contributing member of the work force.

Through experience, the project learned that it was just as important to provide coaching to employers as it was to trainees. Job Coaches were instrumental in building the employers' skills to communicate clearly, to organize job tasks efficiently, and to give instructions for maximum results. Without this aspect of job coaching, employers tended to refrain from interacting directly with trainees and instead relied upon Job Coaches to resolve problems.

Supported Employment. Once on-site training was completed, trainees entered the supported employment phase of the program sequence. Supported employment was provided for a full year, from the start date of employment, and was available to the employee and the employer. As support to the employer, the project offered three services. First, follow-along monitoring of the employee's performance was conducted monthly with the employer to ensure the continuation of a successful employer-employee relationship. Second, the project remained on call to trouble-shoot problems in work performance, work habits, or co-worker relations as they arose. Third, the project provided intermittent or short-term coaching if the employee's performance deteriorated or if the employee needed to learn new job skills.

The program provided support to developmentally disabled employees in a number of ways. First, instruction was provided in life skills which would contribute to greater independence, such as money management consumer skills, and nutrition awareness. Linkages were also made with other community programs to provide cooking lessons and physical exercise programs. Further support offered trainees was work-related counseling. Counseling proved to be a well-utilized resource, which assisted employees in handling interpersonal problems on the job, coping with responsibility, and engaging in career planning.

Additional support was in the form of a recreation/service club, which met the needs of developmentally disabled persons for social contacts and friendship. Club members planned social outings and

participated in community service projects.

EMPLOYMENT OUTCOMES AND PROJECT RESULTS

Of the 52 trainees served, 31 (59.6%) were placed in competitive positions and received on-site training. Twenty-eight of the 31 (90.3%) successfully completed on-site training. Individuals held positions as production worker (5 positions), groundskeeper (1), laundry worker (1), custodian (10), food preparation worker (5), dishwasher (3), courtesy clerk (1), utility worker (1), and animal groomer (1). Wages for this group ranged between $3.35/hour and $5.50/hour, with the mean hourly wage being $3.66.

In terms of hours worked, employees ranged between 4 and 40 hours per week (mean = 21.2 hours). Only 16.1% worked at least 35 hours a week, while another 25.8% worked 20-34 hours, 35.5% worked 15-19 hours, and 22.6% worked less than 15 hours. The number of hours worked lagged substantially behind employment figures for the State, wherein 79.3% of the employed population worked at least 35 hours a week (Office of Research and Statistics, 1980).

Of particular importance was the feedback received from employers who had hired developmentally disabled persons through the project. Employers were asked to rate the disabled employees they hired in comparison to their nonhandicapped employees, as performing above average (score 3), average (score 2), or below average (score 1). The responses were collected from 22 employers on a monthly basis, beginning from when the employee entered the Supported Employment phase and ending December 1984 or upon the employee's termination from the job. The items were analyzed by calculating the mean of each employer's monthly responses, and then calculating a grand mean for each item from individual employer means. The results are presented in Table 1.

As indicated in Table 1, developmentally disabled persons fared well when compared to their non-disabled co-workers. The means for all performance items were in the range of average to above average, with a high mean score of 2.52 for punctuality and low mean scores of 2.06 each for satisfactory performance and following directions. In addition

TABLE 1

Employer Ratings of Developmentally Disabled Employees' Performance When Compared to Non-Disabled Employees'Performance

Item	Mean Response	Percentage Rated Average or Above Average
Attends work regularly	2.49	90
Is punctual for work	2.52	90
Dresses appropriately for work	2.38	95.5
Performs duties in a satisfactory manner	2.06	90
Follows directions well	2.06	72.7
Gets along well with co-workers	2.43	90

to the rating scale, employers were asked to name the strengths of their developmentally disabled employee and to describe the areas of performance or behavior in which the employer would like the individual to improve. The most frequently mentioned areas of strength fell within the domain of work behavior: dependability, willingness to work, getting along well with others, conscientiousness, flexibility, diligence, and following directions. The second most frequently mentioned category involved production: consistency, performance, and quality. When asked what areas needed improvement, employers responded most frequently in the production category: the need for better judgement, greater speed, consistency, the ability to handle pressure, and better work quality. The second most frequently mentioned category was behavior: flexibility, getting along with others, following directions, maturity, following safety procedures, and handling criticism. The fact that similar variables were mentioned under the strengths and weaknesses indicates the importance of these variables for employment success.

FACTORS CONTRIBUTING TO EMPLOYMENT SUCCESS

Three factors were examined as they related to employment success for developmentally disabled trainees: training approach and methodology, program management, and trainee characteristics. Each is discussed in turn below.

Training Approach and Methodology. Although the project purpose was confined to employment matters, it was recognized that success in employment depended in large part upon the attention given to the trainee's needs in other life areas. Therefore, the individual service plan was based upon a holistic approach to service delivery. Depending upon the individual's particular needs, the service plan included provisions for medical support, individual or family counseling, leisure/recreation activities, residential planning, consumer education, and civic involvement. Except in employment matters where the project provided direct service, the project served as an information and facilitating referral resource for obtaining other services in the community. Networking with other community resources enabled the project to provide for comprehensive

services without carrying the cost or staff responsibilities. Not only was this approach cost-effective, it integrated developmentally disabled trainees more fully into the community.

The importance of a holistic approach was substantiated by an examination of the records of 14 individuals who were involuntarily terminated from employment. Fully half of the involuntary terminations were attributed to factors outside employment, which significantly impacted the individual's performance. In five of the seven cases, the employee's home environment was counter-productive to the individual's employment goals. Blaming the individual for his/her disability and for disruption to the family were common traits in these situations. In one case medical conditions precluded the employee's continuation, and in another case psychological barriers contributed significantly to the individual's termination from work. In summary, these "negative" cases demonstrate the importance of providing a holistic approach to programming, not only to the individual but also to the individual's home support network.

Within the context of the holistic approach to service delivery, the project concentrated upon instilling the three "R's" as the guideposts to employment success. These three "R's" stood for "Respect," "Responsibility," and "Relevance."

With regard to respect, the research literature in education and psychology has consistently emphasized the importance of a strong sense of self-esteem and self-respect as the basis for successful learning and coping in the world (Heber, 1964; Maslow, 1968). The project adopted a multi-pronged approach to instilling self-respect, which involved attention to appearance and grooming, social skills, providing positive reinforcement to oneself, assertiveness training, and individualized psychological counseling. The project also elicited the active support of the trainee's family and significant others in activities focused on respect-building.

Closely related to respect-building was the project's purpose of instilling a sense of personal responsibility, whereby trainees saw themselves as "cause" and "prime movers" in influencing the outcomes of events in their lives. Throughout their lives, persons with developmental disabilities have had little experience in perceiving themselves as a positive force in their own lives. Accustomed to frustration and

failure, they and the helpful others with whom they have been in contact have provided excuses for failure, or worse, for not even trying. Through contingency reinforcement and verbal explanation of the reasons for contingency management, the project aimed at making trainees see themselves as the source of whether or not they were recommended for employment, when they were recommended for employment, and whether they were going to be successful in their employment goals.

The third "R" addressed was "relevance:" of training methodology; of timeframe; and of training context. With regard to training methodology, instruction was individualized to meet the particular and idiosyncratic needs of trainees. One-on-one training enabled the Job Coach to modify the instructional mode (whether verbal, demonstration, or physical assistance), contingencies, and types of reinforcement to meet the developing needs of individuals. Individualized instruction also contributed to efficiency in instruction in that errors could be corrected as they occurred.

Relevance was also concerned with the juxtaposition of timing between learning and the application of new skills acquired. In this respect, work-related skills and behaviors were taught as they were needed by the trainees to handle specific aspects of their lives. With relevance in timing, trainees' motivation in learning remained at a high level, since they perceived a definite, immediate, and concrete stake in the learning outcomes.

Lastly, relevance was concerned with the context in which skills were taught to the extent possible, skills and behaviors were taught in the natural environments in which they would be performed. The argument for contextual relevance is, of course, the foundation for community-based training. Contextual learning provided trainees the opportunity to adapt skills and behaviors to particular persons and situations, thereby avoiding the problems of generalization often associated with classroom-based instruction.

Program Management. The second factor examined as it related to employment success for developmentally disabled trainees was program management. In this regard, the program management directed staff to network with other service providers and community resources in providing comprehensive services for trainees. Project staff assisted

trainees to obtain medical, psychological, educational, financial and transportation support services, and cut through confusing and cumbersome red tape. Duplication of services and gaps in service were thus avoided. The project's willingness to coordinate these services resulted in the provision of comprehensive services by a multi-disciplinary management team.

In addition to the trainees benefitting from a variety of community resources, the project also benefitted. The project was able to promote comprehensive services delivery without incurring the costs of providing the services directly and without utilizing a lot of staff time. In addition, the constant exchange of communication between the project and other service providers resulted in the development of a broad base of support and vested interest in the project's successful outcome. The project buttressed this support by making a conscious effort to acknowledge cooperative efforts publicly with the media and recognition receptions. Wherever possible, credit for success was shared, whether the credit was for the success of a disabled person in employment or for a developmental milestone attained by the project.

Trainee Characteristics. The third factor examined as it related to employment success involved trainee characteristics. Three key variables identified within this factor were: (1) work motivation; (2) support from the home or significant others; and (3) work history. Significantly, functioning level was not related to employment success although it did influence the training time frame. In the first variable, motivation to work (a psychological predisposition to action) was inferred from behavior. Motivation to work was considered to be present, as when given a choice in overcoming a barrier to employment, the trainee chose a course of action and acted on a choice which supported work outcomes. The importance of motivation was examined by first identifying all those persons who were reported by employers as having difficulties in work adjustment. The reasons for the difficulties were analyzed, and recommendations for remedial action were made by staff. Such recommendations included entering family counseling, obtaining other support services, or making specific behavioral changes with staff support.

Employment data showed that work adjustment difficulties were reported by employers in 23 cases. In 16 of these cases, the employee

(project trainee) chose to follow the recommendations made for remediation. Of those persons, 75% were able to overcome their barriers and retain their employment. In 25% of the cases, the employee was terminated in spite of efforts to implement remediation. All seven persons who chose not to follow the recommendations made or who did not implement the recommendations after choosing to do so were terminated from their jobs.

The second trainee variable which had a significant impact on employment success involved the support, or more accurately the lack of support, by the trainee's family or significant others toward employment goals. In five of the seven cases (71.4%) in which the trainee chose not to implement remedial recommendations, the recommendation involved family counseling. These individuals came from home environments which were characterized by alcoholism, blaming the disabled individual for family problems, or wanting to keep the individual in a dependency status. All of these individuals were eventually terminated from their jobs. In examining the cases of those who were able to retain their employment, it was found that they came from home environments which either actively supported their employment goals or at least did not interfere with the attainment of them.

The final variable which impacted employment success was the trainee's work history. The records of those who were placed in competitive training/employment positions were examined. The work histories of those who were terminated from on-site training or supported employment were compared with those who retained employment. Those who had been terminated because of adverse business conditions were included among those whose employment performance was rated satisfactory to employers. Thus, among the 11 individuals who had been involuntarily terminated, they had held a total of 17 positions, which included competitive, sheltered, college work-study training, or volunteer positions. The average number of positions was 1.54. For the 16 persons whose performance was rated satisfactory, they had a work history which totaled 39 positions, for an average of 2.44. Clearly, the work history of the employed group was greater than the terminated group. When the two groups were compared only in terms of the number of previous competitive positions held, the employed group again fared better, having held 25 positions at an average of 1.56 positions per person. This compared

to the 12 positions held by the terminated group, which averaged 1.09 positions each.

The importance of work history for employment success calls into question commonly made judgements that if a person fails in the competitive work world, that person has demonstrated that he/she is not "ready" for competitive employment and therefore should be recommended for remedial work in more sheltered environments. Rather the current data indicates that through repeated trials, the individual learns not only what job he/she may be capable of performing, but also what behaviors and skills are necessary to maintain employment.

CONCLUSION

Vocational competence is recognized as a critical variable assisting the participation of developmentally disabled persons within valued roles of society. For many disabled persons, the concept of sheltered services has not assisted their efficient transition into less restrictive, community based employment. Researchers and service providers are increasingly demonstrating the effectiveness of training disabled persons in more naturalistic community environments. Community based training and employment projects are demonstrating that the work of developmentally disabled persons fares well when compared with the work of their non-handicapped peers. Systematic feedback from employers provides a basis for defining the strengths and needs of developmentally disabled persons within work environments.

The current study has yielded several factors contributing to the successful participation of developmentally disabled persons within competitive employment settings. Employment success factors have been generated within the areas of (1) training approach and methodology, (2) program management, and (3) trainee characteristics. The identified success factors indicate that several service providers and relevant persons share the responsibility to assist disabled persons to achieve successful competitive employment. Human service agencies must work together from a broad base of multidisciplinary support to address the needs of disabled persons as they transition from sheltered and/or

secondary school special education programs to competitive employment. Implications call for the development of appropriate administrative arrangements and coordinated agency linkage to provide normalized competitive employment preparation with maximum effectiveness.

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